

# Report and Recommendation of the President to the Board of Directors

Project Number: 35173 August 2014

Proposed Loan and Administration of Loan and Grant Nepal: Third Small Towns Water Supply and Sanitation Sector Project

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Asian Development Bank

#### **CURRENCY EQUIVALENTS**

(as of 2 July 2014)

Currency unit	_	Nepalese rupee/s (NRe/NRs)
NRe1.00	=	\$0.0103
\$1.00	=	NRs96.25

## ABBREVIATIONS

ADB	_	Asian Development Bank
DWSS	_	Department of Water Supply and Sewerage
EIRR	_	economic internal rate of return
EMP	-	environmental management plan
GESI	-	gender equality and social inclusion
IEE	-	initial environmental examination
ISSAU	-	institutional support and service advisory unit
OFID	-	OPEC Fund for International Development
O&M	-	operation and maintenance
PAM	-	project administration manual
PMO	-	project management office
SEIU	-	sector efficiency improvement unit
SFA	-	subproject financing agreement
TDF	-	Town Development Fund
WFPF	-	Water Financing Partnership Facility
WSS	-	water supply and sanitation
WUA	-	water users' association
WUSC	-	water users and sanitation committee

#### NOTES

- The fiscal year (FY) of the Government of Nepal ends on 15 July. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2014 ends (i) on 15 July 2014. In this report, "\$" refers to US dollars.
- (ii)

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# **PROJECT AT A GLANCE**

1.	Basic Data			Project Number: 35173-01
	Project Name	Third Small Towns Water Supply and	Department	SARD/SAUW
	-	Sanitation Sector Project	/Division	
	Country	Nepal	Executing Agency	Ministry of Urban
	Borrower	Nepal		Development
2.	Sector	Subsector(s)		ADB Financing (\$ million)
1	Water and other urban	Urban policy, institutional and capacity d	evelopment	11.90
	infrastructure and services	Urban sanitation		3.90
		Urban water supply		44.20
			Total	60.00
3.	Strategic Agenda	Subcomponents	Climate Change Infor	mation
0.		ar 2: Access to economic opportunities,	Adaptation (\$ million)	35.60
		luding jobs, made more inclusive	Mitigation (\$ million)	3.90
		bal and regional transboundary	$CO_2$ reduction (tons pe	
	sustainable growth (ESG) env		Climate Change impac	
		oan environmental improvement	Project	
4.	Drivers of Change	Components	Gender Equity and Ma	ainstreaming
		il society participation	Gender equity (GEN)	1
		titutional development		
		il society organizations		
		blementation		
		ernational finance institutions (IFI)		
		icial cofinancing		
5.	Poverty Targeting		Location Impact	
	Project directly targets	Yes	Urban	High
	poverty Household targeting (TI-H)	Yes		
		Tes		
6.	Risk Categorization:	Low		
7.	Safeguard Categorization	Environment: B Involuntary Res	ettlement: B Indigenous	s Peoples: C
8.	Financing			
	Modality and Sources		Amount (\$ million)	
	ADB			60.00
	Sovereign Sector Ioan: As	sian Development Fund		60.00
	Cofinancing			21.30
		nership Fund (under the Water		1.30
	Financing Partnership Facility OPEC Fund for Internatio	y or WEPE)		00.00
		nai Development		20.00
	Counterpart Government			<b>27.70</b> 23.10
	Government			23.10
	Beneficiaries			4.60
	Total			109.00
9.	Effective Development Coop			
	Use of country procurement sy			
	Use of country public financial	management systems Yes		

# I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan, (ii) proposed administration of a loan to be provided by the OPEC Fund for International Development (OFID), and (iii) proposed administration of a grant to be provided by the Sanitation Financing Partnership Trust Fund<sup>1</sup> under the Water Financing Partnership Facility (WFPF) to Nepal for the Third Small Towns Water Supply and Sanitation Sector Project.<sup>2</sup>

2. The project will support the Government of Nepal in providing water supply and sanitation (WSS) services to selected small towns in Nepal. Small towns are defined mainly as towns that have (i) a population of 5,000–40,000; (ii) minimum density of 10 people per hectare; and (iii) permanent access to roads, power, and telecommunications, i.e., potential for growth. In line with the government's 15-Year Development Plan for Water Supply and Sanitation in Small Towns (15-year plan) of 2009, the Asian Development Bank (ADB) has supported the government in providing WSS services in 50 of the 265 small towns in Nepal through two earlier projects.<sup>3</sup> Drawing on experience and lessons from the earlier interventions, this project will fund physical investments in WSS infrastructure in selected small towns (project towns)<sup>4</sup> and nonphysical investments in the strengthening of sector policy, regulatory and institutional capacity, service delivery, and project management.<sup>5</sup>

## II. THE PROJECT

#### A. Rationale

3. **Challenges and opportunities of urbanization.** Nepal is experiencing rapid urbanization. The urban population, estimated at over 7.5 million in 2011,<sup>6</sup> is projected to increase by 32% by 2027.<sup>7</sup> While urban areas are engines of economic growth, accounting for 65% of gross domestic product, unmanaged urban growth poses environmental hazards and can lead to rising urban poverty if economic opportunities and provision of urban infrastructure and municipal services do not keep up with the growing urban population.<sup>8</sup> This can be seen in the rising incidence of poverty in urban areas of the country—from 9.2% in 2004 to 15.5% in 2011—and the challenge to meet growing demand for municipal services.<sup>9</sup>

4. **Sector performance.**<sup>10</sup> In 2011, the share of the country's population that used an improved drinking water source was 85% (87% urban, 84% rural), while the share that used an

<sup>&</sup>lt;sup>1</sup> Financing partner: Bill & Melinda Gates Foundation.

<sup>&</sup>lt;sup>2</sup> The design and monitoring framework is in Appendix 1.

<sup>&</sup>lt;sup>3</sup> ADB. 2000. Report and Recommendation of the President to the Board of Directors: Small Towns Water Supply and Sanitation Sector Project. Manila (Loan 1755-NEP); and ADB. 2009. Report and Recommendation of the President to the Board of Directors: Proposed Asian Development Fund: Second Small Towns Water Supply and Sanitation Sector Project. Manila (Grant 0157-NEP).

<sup>&</sup>lt;sup>4</sup> Project towns: up to 26 small towns for new WSS facilities and selected towns from Loan 1755-NEP for rehabilitation of facilities. Based on data from 12 pre-identified project towns, the average population is estimated at 15,000.

<sup>&</sup>lt;sup>5</sup> ADB provided project preparatory technical assistance (TA) for Preparing the Third Small Towns Water Supply and Sanitation Project (TA 8346-NEP).

<sup>&</sup>lt;sup>6</sup> Government of Nepal, Central Bureau of Statistics. 2012. *National Population and Housing Census 2011*. Kathmandu. Projected population after the introduction of 72 additional municipalities in May 2014.

<sup>&</sup>lt;sup>7</sup> Government of Nepal, National Planning Commission. 2006. *Nepal Population Perspective Plan, 2002–2027*. Kathmandu.

<sup>&</sup>lt;sup>8</sup> World Bank. 2012. Nepal: Urban Growth and Spatial Transition: An Initial Assessment. Kathmandu.

<sup>&</sup>lt;sup>9</sup> Government of Nepal, Central Bureau of Statistics. 2012. *Poverty in Nepal, 2010/2011*. Kathmandu (in Nepali).

<sup>&</sup>lt;sup>10</sup> Sector Assessment (Summary): Water and Other Urban Infrastructure and Services (accessible from the list of linked documents in Appendix 2).

improved sanitation facility was 62% (91% urban, 55% rural) (footnote 6).<sup>11</sup> However, the number of people that are supplied with piped water still account for less than 20% of the population, and availability of that service is intermittent in many areas and most systems need repair. In unserved areas, water sources are either natural springs, spouts, or shallow groundwater wells and hand pumps. In small towns, according to Water Aid estimates in 2010, only 5% of the population had access to piped water, and sanitation coverage was 36%.<sup>12</sup> Open defecation contaminates water sources and leads to serious public health risks. Each year, some 13,000 children under 5 years of age die of diarrheal diseases.

5. **Sector development plan.** The government, through its National Water Plan and the 15year plan, has set 2017 as the target year for achieving universal access to basic WSS facilities and making the country free of open defecation.<sup>13</sup> The 15-year plan defines specific service standards for WSS in small towns. In recognition of these targets and priorities, the government has, through various acts and policies, defined institutional responsibilities and service delivery mechanisms in the sector, including establishing a decentralized governance structure.

6. **Sector institutional framework and financing.** The Ministry of Urban Development (MOUD) is responsible for planning, implementation, regulation, and monitoring of WSS and other urban services in the country. The Department of Water Supply and Sewerage (DWSS), under the MOUD, is responsible for provision of WSS facilities in small towns where large utilities do not exist, and these are operated by either local bodies such as municipalities, or the water users' associations (WUAs). The DWSS is responsible for monitoring tariffs, and supporting local bodies and WUAs in WSS service delivery. Development support for WSS in small towns is mainly being channeled through budget allocation as grants to the DWSS and loans to the Town Development Fund (TDF), with contributions from the local bodies or beneficiaries.<sup>14</sup> Annual spending for the sector by the national government has averaged about \$106 million.<sup>15</sup> While the government has increased investments in small towns from \$4.0 million in 2010 to \$9.8 million in 2012, a large gap remains. The 15-year plan estimated in 2009 that \$272 million was required to reach the intended coverage of WSS in small towns by 2015. The government is now preparing a sector financing strategy, as part of the updated 15-year plan, with support from ADB.

7. **Benefits and lessons from earlier projects.** ADB provided a loan of \$35 million for the first project in 2000, which helped 29 small towns and 593,000 people gain access to improved water supply services (footnote 3). That project introduced a participatory financing mechanism for beneficiaries and operation of WSS services through WUAs. It was completed in 2009. In its project validation report, ADB's Independent Evaluation Department rated the first project *successful overall*.<sup>16</sup> In 2009, ADB provided a grant of \$45.1 million for the ongoing second project, which helps cover 21 small towns and 335,246 people with WSS services (footnote 3). Its implementation is on track and completion by the end of 2016 is feasible. Despite their general success, these two projects leave room for improvement and some strong lessons to take on board, particularly in the fields of technical robustness, capacity of operators and the TDF, subsidy

<sup>&</sup>lt;sup>11</sup> An improved drinking water source is one that is protected from outside contamination, and an improved sanitation facility is a toilet system that hygienically separates human excreta and is connected to drainage or a septic tank.

<sup>&</sup>lt;sup>12</sup> Water Aid Nepal, 2010. *Country Strategy, 2010–2015.* Kathmandu. Based on a household survey of sample towns under project preparatory TA conducted in 2013, only 26% of households in these towns did not have toilet.

<sup>&</sup>lt;sup>13</sup> Government of Nepal. 2005. *National Water Plan*. Kathmandu.

<sup>&</sup>lt;sup>14</sup> The TDF is a fully government-owned entity, established under the TDF Act, 1997. Loans from the government to local bodies or WUAs are generally onlent through the TDF. Its financial capacity, however, has not grown in parallel with the exceptional increase of funds and lending commitments.

<sup>&</sup>lt;sup>15</sup> Three years of data (2010–2012) from the Ministry of Finance's budget documents.

<sup>&</sup>lt;sup>16</sup> Independent Evaluation Department. 2012. *Performance Evaluation Report: Small Towns Water Supply and Sanitation Sector Project in Nepal.* Manila: ADB; and ADB. 2010. *Completion Report: Small Towns Water Supply and Sanitation Sector Project in Nepal.* Manila (September, submitted by ADB's South Asia Department, the implementing agency).

and financing mechanism, and overall institutional framework to strengthen governance and longterm operational sustainability. These lessons were incorporated into the design of the proposed (third) project as reforms that will ensure adequate technical and institutional capacity for sustainable service delivery, and help the government meet its WSS targets for small towns. These reforms are also expected to enable the government and its development partners to adopt a programmatic and results-based approach to future sector development.

8. **Strategic fit.** The project is in line with ADB's water and urban operational plans, and its country partnership strategy (2013–2017) for Nepal, which states that ADB will support (i) improvements in inclusive access to and service levels of WSS in small towns, and (ii) institutional strengthening and capacity building of local governments, service providers, and the TDF.<sup>17</sup>

# B. Impact and Outcome

9. The impact of the project will be improved living conditions in project towns. The outcome will be inclusive, gender-focused, and sustainable WSS service delivery in project towns.

# C. Outputs

- 10. The project has three outputs:
  - (i) Output 1: Improved water supply and sanitation infrastructure. This will finance (a) upgrade or construction of water supply systems in up to 26 small towns—e.g., about 1,450 kilometers of water supply pipelines, 78,000 additional household connections, and 26 water treatment systems with an estimated capacity of 50,000 cubic meters per day; (b) construction of some 20,300 additional private toilets with septic tanks for the poor and vulnerable, through output-based aid; (c) provision of septage management facilities and equipment in 14 towns,<sup>18</sup> and construction of two decentralized wastewater treatment facilities with a capacity of 2,500 cubic meters per day; (d) preparation of drainage master plans and provision of priority drains in towns with flooding risks;<sup>19</sup> (e) rehabilitation of about five packages of existing WSS systems; and (f) maintenance of nonrevenue water at around 10% in project towns' water supply systems.
  - (ii) Output 2: Strengthened sector policy, regulatory and institutional capacity, and service delivery. This will fund (a) preparation, adoption, and implementation of tariff guidelines for small towns; (b) establishment of a new institutional support and service advisory unit (ISSAU) in the DWSS; construction of a building for the DWSS; and completion and implementation of business plans for the DWSS, its national water supply and sanitation training centre, SEIU, and participating WUAs; (c) restructuring of the TDF for capacity building; (d) completion of solid waste management plans for project towns; (e) provision of technical, financial, and utility management training to participating WUAs or local bodies, including computerization of their billing and collection system;<sup>20</sup> (f) provision of leadership training to female executive members of project WUAs or local bodies; and (g) public awareness on solid waste management, water conservation, water sanitation and hygiene, and livelihood enhancement in project towns.

<sup>&</sup>lt;sup>17</sup> ADB. 2013. *Country Partnership Strategy: Nepal, 2013–2017.* Manila.

<sup>&</sup>lt;sup>18</sup> On-site sanitation is found to be appropriate for the project towns due to their population size and low density. The project will assist the government in strengthening the regulatory and institutional framework for septage management in small towns, and in providing facilities and equipment for the same in four towns with support from the Sanitation Financing Partnership Trust Fund under the Water Financing Partnership Facility. Grant Component of Loan—Piloting Innovative Septage Management in Small Towns (accessible from the list of linked documents in Appendix 2). The project will extend the septage facilities for 10 additional towns under output 1.

<sup>&</sup>lt;sup>19</sup> For these towns, drainage master plans will be prepared. The investments will only be included if proposed segments are also identified as priority segments in the drainage master plans.

<sup>&</sup>lt;sup>20</sup> Water users and sanitation committees (WUSCs) are the elected executive bodies of the WUAs.

(iii) **Output 3: Improved project implementation.** This will fund project management, project design, and supervision of project construction activities.

#### D. Investment and Financing Plans

11. The project is estimated to cost \$109 million (Table 1). The government has requested a loan in various currencies equivalent to SDR38,921,000 (\$60 million) from ADB's Special Funds resources, and a loan of \$20 million equivalent from OFID to help finance the project. The Asian Development Fund loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions as set forth in the draft loan and project agreements<sup>21</sup>. The loan from ADB will finance (i) WSS infrastructure in project towns, (ii) consulting services, (iii) institutional support and capacity building, (iv) incremental recurrent staff costs, (v) vehicles and equipment, and (vi) financing charges on the ADB loan during construction. Subprojects will be financed by a combination of (i) government grant from the DWSS; (ii) loan by TDF; and (iii) users' cash contribution, generally on a ratio of 70:25:5.22 Part of the funds provided by the government, ADB, and OFID (maximum 25% of the total cost for WSS civil works) will be relent to the TDF under a subsidiary loan agreement on terms and conditions acceptable to ADB. The TDF will then onlend to the WUAs or local bodies under a subproject financing agreement (SFA) on terms and conditions acceptable to ADB, which shall include a repayment period of 25 years,<sup>23</sup> including a grace period of 5 years, and an interest rate of 5% per annum. The government and the WUAs or local bodies will provide \$27.7 million equivalent to cover (i) part of the infrastructure, (ii) part of recurrent staff costs, (iii) taxes and duties, and (iv) financial charges on the OFID loan.<sup>24</sup> The Sanitation Financing Partnership Trust Fund (footnote 1) under the Water Financing Partnership Facility (WFPF) will provide grant cofinancing equivalent to \$1.3 million, fully administered by ADB. to finance piloting of innovative septage management in four project towns under output 1.

12. The OFID loan, to be partially administered by ADB, will have a 20-year term, including a 5-year grace period and an annual interest rate of 2.5%. It will cofinance, on a parallel basis, WSS subprojects in project towns under output 1.<sup>25</sup> The project financing plan is in Table 2.

Item		Amount <sup>a</sup>
Α.	Base Cost <sup>D</sup>	
1.	Output 1: Improved water supply and sanitation infrastructure	81.8
2.	Output 2: Strengthened sector policy, regulatory and institutional capacity, and service delivery	3.4
3.	Output 3: Improved project implementation	9.8
	Subtotal (A)	95.0
В.	Contingencies <sup>c</sup>	11.7
С.	Financing Charges During Implementation <sup>d</sup>	2.3
	Total (A+B+C)	109.0

### Table 1: Project Investment Plan (\$ million)

<sup>a</sup> Including taxes and duties of \$10.9 million to be financed by the government. Nominal taxes and duties expected on vehicles and equipment financed by the Asian Development Bank (ADB) shall also be borne by ADB.

<sup>&</sup>lt;sup>21</sup> Loan Agreement, Grant Agreement, and Project Agreement (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>22</sup> In cases of unaffordability of towns, arising from various exceptional causes, the government may increase the grant. The 5% in users' contributions are the upfront cash contributions raised by the WUAs or local bodies, who will commit that the poor and vulnerable will be exempt from such cash contributions.

<sup>&</sup>lt;sup>23</sup> For the OFID loan funds, the SFA will have the same tenure as the loan.

<sup>&</sup>lt;sup>24</sup> Any resettlement and other social costs, if incurred, will also be covered by the government or local bodies or WUAs.

<sup>&</sup>lt;sup>25</sup> OFID funds and ADB funds, while parallel, will finance different project towns, so even if any shortfalls were to arise under the OFID loan, ADB-financed subprojects would continue to be funded as scheduled. The impact of such shortfalls would be limited to the downscaling of the overall project targets.

<sup>c</sup> Physical contingencies computed at 10.0% for civil works and 5% for all other costs. Price contingencies computed on foreign exchange costs at 2.3% for 2014, 1.0% for 2015, and 1.4% for 2016 onward, and local currency costs at 10.5% for 2014, 9.0% for 2015, and 7.0% for 2016 onward; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Includes interest computed at 1.0% per year for the Asian Development Fund and 2.5% per year for the OPEC Fund for International Development.

Table 2: Financing Plan

Source: Asian Development Bank estimates.

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	60.0	55.0
OPEC Fund for International Development (loan)	20.0	18.0
Sanitation Financing Partnership Trust Fund under the Water	1.3	1.0
Financing Partnership Facility (grant) <sup>a</sup>		
Government of Nepal	23.1	22.0
Beneficiaries (local bodies and users)	4.6	4.0
Total	109.0	100.0

<sup>a</sup> Financing partner: Bill & Melinda Gates Foundation. Grant fully administered by the Asian Development Bank. Source: Asian Development Bank estimates.

#### E. Implementation Arrangements

13. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual (PAM).<sup>26</sup>

Table 3: Implementation Arrangements			
Aspects		Arrangements	
Implementation period	October 2014–January 2021		
Estimated completion date	31 January 2021		
Management			
(i) Oversight body	secretaries of MOUD, MC director generals of DWS	nmittee: secretary of MOUD (ch DFALD, MOLJ, and NPC; MOF S and DUDBC; executing direct , and project director (member	representative; ctor of TDF;
(ii) Executing agency	MOUD		
(iii) Implementing agency	DWSS <sup>a</sup>		
(iv) Implementation unit	Regional project management offices (total 2), 10-14 staff each		
Procurement	International competitive bidding	12 contracts	\$92.38 million
	National competitive bidding	11 contracts	\$2.00 million
	Shopping	9 contracts	\$0.24 million
	Community participation	5 contracts	\$0.04 million
Consulting services	QCBS	1,720 person-months national	\$7.98 million
	ICS	22 person-months international; 204 person- months national	\$0.78 million
Retroactive financing and/or advance contracting		be allowed for procurement of an of consultants. Retroactive f	

## **Table 3: Implementation Arrangements**

<sup>&</sup>lt;sup>26</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2). Since ADB is administering cofinancing resources for operations financed by Asian Development Fund resources, universal procurement will apply to all procurement packages to be financed under this project. ADB. 2013. Blanket Waiver of Member Country Procurement Eligibility Restrictions in Cases of Cofinancing for Operations Financed from Asian Development Fund Resources. Manila.

Aspects	Arrangements
	allowed for eligible expenditures incurred for consulting services and procurement of goods, services and civil works, project management, and project administration up to 12 months before the loan signing date, and not exceeding 20% of the loan amount.
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2012, as amended from time to time) and arrangements agreed upon between the government and ADB.

ADB = Asian Development Bank, DUDBC = Department of Urban Development and Building Construction, DWSS = Department of Water Supply and Sewerage, FedWASUN = Federation of Drinking Water and Sanitation Users Nepal, ICS = individual consultant selection, MOFALD = Ministry of Federal Affairs and Local Development, MOLJ = Ministry of Law and Justice, MOF = Ministry of Finance, MOUD = Ministry of Urban Development, NPC = National Planning Commission, QCBS = quality- and cost-based selection, TDF = Town Development Fund.

<sup>a</sup> The TDF will conduct the following key tasks: (i) financial appraisal of the subprojects, (ii) signing subproject financing agreements with the water users' association (WUAs) or local bodies, (iii) onlending the loan portion to the WUAs or local bodies, (iv) monitoring tariffs, (v) training WUAs in financial management, and (vi) collecting repayments. Source: Asian Development Bank.

#### III. DUE DILIGENCE

#### A. Technical

14. **Improvements based on lessons**. The project incorporates several improvements over the earlier two projects based on lessons learned: on the technical side, (i) more robust design standards; (ii) better quality assurance and control measures by engaging dedicated design, review, and technical audit consultants for the project period; (iii) better project and social preparation to avoid delays and improve sustainability; and (iv) strengthening of design guidelines for small towns. On the institutional and financial side, the improvements include: (i) setting up of the ISSAU to provide continued technical, utility management, and corporatization support to WUAs or local bodies<sup>27</sup>; (ii) adoption of tariff guidelines and management agreements between WUAs or local bodies with clear definition of roles and responsibilities for both parties; (iii) better subsidy mechanism and more coverage of the poor;<sup>28</sup> (iv) adequate capacity and resources for project implementation; (v) lower financial contribution of the community based on their affordability; <sup>29</sup> and (vi) strengthening of the TDF through institutional capacity building and restructuring.

15. **Compatible designs and stronger operating capacity.** Sample subprojects were selected and designed after an options assessment and least-cost analysis. Designs and technologies had to be compatible with local conditions and the capacity of WUAs or local bodies to operate. The same approach will continue for all subprojects.<sup>30</sup> All water distribution systems will be designed on a district metering area basis to optimize their efficiency. To improve sustainability of the systems, the project will provide (i) basic resources such as staff and equipment; (ii) extensive training and utility management support; (iii) computerization of billing and collection systems; (iv) business plan preparation; and (v) 1 year of operation and maintenance (O&M) in all works contracts. Revenue from tariff will cover O&M costs. Power backup generators will be provided to ensure operation during Nepal's frequent power failures. The proposed grant from the Sanitation Financing Partnership Trust Fund under the WFPF will support the government in

<sup>&</sup>lt;sup>27</sup> ISSAU will assist the WUAs of small towns (population of about 35,000) in their corporatization, either as a water board under the Water Board Act, 2006, or as a company under the Companies Act.

<sup>&</sup>lt;sup>28</sup> The first project only covered around 29% of the poor. This project will cover all poor and vulnerable by providing a 100% upfront cash subsidy for water supply, and a 90% subsidy for toilets through output-based aid.

<sup>&</sup>lt;sup>29</sup> Under the first and the second projects, the loan and users' contributions amounted to 50%. This has been reduced to 30% (up to 25% loan, and minimum 5% contributions), which is consistent with the government's sector policy.

<sup>&</sup>lt;sup>30</sup> Subproject selection criteria are defined in the PAM. In selecting project towns, further preference will be given to small towns situated on the north-south and west-east economic corridors.

institutional strengthening and piloting of innovative septage management solutions in four selected small towns, which will be replicated in 10 or more towns under the project. It also adopts the sector lending modality, thus providing flexibility and adequate project preparation.

16. **Climate change resilience and adaptation measures.** The project is categorized as low risk for climate change impact. A preliminary climate risk screening as per ADB's requirement was conducted and the initial score was low.<sup>31</sup> Climate risks were considered based on the sample subprojects. To reduce the impact of climate change on physical investments by future subprojects and build resilience of project towns, the DWSS design guidelines for small towns will incorporate a separate section on climate change containing assessment and adaptation procedures. The project design incorporates specific measures: (i) the groundwater source for water supply will be from deeper aquifers where yields are sustainable and not affected by changes in precipitation, (ii) pipes will be constructed below ground to avoid damage during floods, (iii) source protection and water safety plans will be implemented in project towns, (iv) no infrastructure will be constructed in the floodplains, (v) adequate data will be collected and tests conducted to determine sustainability of the source, and (vi) water conservation measures will be adopted by the WUAs or local bodies.

## B. Economic and Financial

17. **Economic analysis.** The economic rationale for government intervention is sound because the investment program supports stronger basic civic services, a public good provided by the government. The expected quantifiable economic benefits consist of (i) time saved in collecting water, (ii) incremental piped water, (iii) value of nonrevenue water, and (iv) savings in health care expenditure. Other potential economic benefits, such as improved school attendance and reduction in unpaid labor, have not been quantified.

18. The economic analysis for the project evaluated the economic viability of the sample subprojects.<sup>32</sup> The economic internal rate of return (EIRR) of 14.2%–25.3% for the sample subprojects is higher than the economic opportunity cost of capital of 12%, indicating sufficient economic benefits. The results are robust against downside risks, including (i) capital cost overrun by 10%, (ii) O&M cost overrun by 10%, (iii) benefits reduced by 10%, and (iv) 1-year delay in project implementation. EIRRs range from 9.6% to 25.1% in the sensitivity analysis; the minimum EIRR falls to 9.61%, marginally below the 12% hurdle rate, when cost overrun and benefit reduction are taken to occur at the same time, which is improbable. The sensitivity analysis shows that the EIRRs are relatively more sensitive to an increase in capital costs or a reduction in benefits. Given Nepal's rapidly increasing population in urban areas—32% of total population by 2027 (footnote 7)—the risk for unrealized economic benefits from the project is minimal.

19. **Financial analysis.** Financial analysis was conducted in the sample towns for revenuegenerating subprojects by estimating cash flows over the project life, to ensure that sample subprojects individually, and the project as a whole, are financially viable and will generate sufficient revenues to cover O&M and debt service costs (based on the sample subprojects).<sup>33</sup> A government grant is funding 70% of capital costs of the water supply subprojects, and 85% of capital costs of the sanitation subprojects. Revenue streams are not intended for full cost recovery but to recover only O&M and debt service costs. Accordingly, an assessment of the financial internal rate of return of the project is not meaningful and was not carried out. Cash-flow analysis conducted confirms that, with some government subsidy and reasonable tariff increases, sample towns have the financial capacity to meet O&M and service debt costs to sustain infrastructure and

<sup>&</sup>lt;sup>31</sup> Preliminary Climate Risk Screening Checklist is included in the draft Initial Environmental Examinations of each of the sample subproject towns (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>32</sup> Economic Analysis (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>33</sup> Financial Analysis (accessible from the list of linked documents in Appendix 2).

service delivery for the sample subprojects. Analysis of the TDF's projected financial statements also indicates continued profitability and adequate leveraging to support the project. TDF covenants ensure an adequate debt–equity ratio and sufficient recovery rates.

# C. Governance

20. Anticorruption and governance measures under the second project remain appropriate and will be extended in this project. ADB's Anticorruption Policy (1998, as amended to date) was explained to the government, MOUD, and the TDF. The DWSS will regulate the WUAs under its Operating Directives, 2012, with assistance from ISSAU. Participating WUAs will be governed by their management agreement with the DWSS. Additional measures are detailed in the PAM (footnote 26). With the proposed mitigating measures, the financial management capacity of the DWSS, TDF, and WUAs or local bodies is adequate to implement and sustain the project.<sup>34</sup> Extensive public communication will be carried out regularly with the stakeholders, and any grievance will be dealt with efficiently under the established grievance redress mechanism.

# D. Poverty and Social

21. **Socially inclusive and gender-focused interventions**. The approach and interventions of the project are socially inclusive, gender-focused, and community-led.<sup>35</sup> The project will cover all poor and vulnerable households, including those headed by women in project towns, with individual water connections and toilets, which are anticipated to lead to economic benefits.<sup>36</sup> The framework for inclusion of the poor and vulnerable, included in the PAM, will ensure targeted coverage of all poor and vulnerable households through a 100% upfront subsidy for water supply connection and a 90% subsidy for individual toilets through output-based aid. These subsidies will ensure affordability and access to better service, while a lifeline tariff subsidy for water supply will ensure continuous affordability of water user charges by poor households. Participation of the community, especially of women and those from socially excluded groups, is elicited by raising awareness of the project. The consultation and participation plan for the project will maximize participation of stakeholders. A gender equality and social inclusion (GESI) action plan will ensure that gender and social activities are implemented and monitored at regular intervals.<sup>37</sup>

22. Data, disaggregated by sex, ethnicity, and social and economic background, will be collected within 1 year of the regular intervals to help establish baseline figures to track social and gender equality results as the project progresses. MOUD has recently formulated policy guidelines for GESI, meant to be an integral part of each project and program under its operation. To monitor GESI, MOUD set up a social coordination unit, supported by a team of GESI consultants. A GESI unit has also been established in the DWSS, responsible for monitoring implementation of the GESI action plan of different DWSS projects. Given this strong policy context, and in recognition of the wider social and structural dimensions of gender inequality in the country, the project is expected to yield significant benefits for women, as summarized in the GESI action plan.

# E. Safeguards

23. **Environmental.** The project is classified as category B for environmental safeguards. Three draft initial environmental examinations (IEEs) with environmental management plans

<sup>&</sup>lt;sup>34</sup> Detailed Financial Management Assessment (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>35</sup> Summary Poverty Reduction and Social Strategy (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>36</sup> Vulnerable persons are defined as those suffering the effects of marginalization within or outside their community due to their ethnicity, gender, caste, religion, disability, health, education, or socioeconomic status. For the purposes of this project, his specifically includes Dalit, disabled, disaster-affected, marginalized, and endangered indigenous groups that are politically, socially, or economically excluded.

<sup>&</sup>lt;sup>37</sup> Gender Equality and Social Inclusion Action Plan (accessible from the list of linked documents in Appendix 2).

(EMPs) are being prepared for the sample subprojects in accordance with ADB's Safeguard Policy Statement (2009).<sup>38</sup> Once approved, they will be publicly disclosed. They will be further updated during the detailed engineering design for each subproject and included in the tender documents. The draft IEEs for the sample subprojects concluded that no significant negative impacts are to be expected and that the project will yield a substantive net environmental benefit. Any impacts during construction and operation will be avoided or mitigated through measures outlined in the EMP, which will form part of all bidding documents. Measures used in the sample subprojects include (i) application of sufficient buffer zones between WSS facilities, and use of liners to prevent contamination of water sources; and (ii) locating subprojects outside sensitive areas. A draft environmental assessment and review framework<sup>39</sup> is being prepared to guide environmental assessment of future subprojects. During implementation, loan consultants will support the environmental officers of the PMO and its regional counterparts, and field-based EMP monitors, in managing environmental impacts. Environmental reporting to ADB will be semiannual.

24. Social. The project is categorized as B for involuntary resettlement. No permanent land acquisition or physical displacement was found necessary for the sample subprojects in Chandrauta, Charali, and Mahendranagar. The land required for the facilities is mostly provided through negotiated settlement, or is a donation by the community organizations or private landowners, or is government land. In Mahendranagar, one household headed by a woman will lose access to the land to construct subproject facilities. A draft resettlement plan is being prepared to ensure restoration of the affected family's livelihood. Two due diligence reports are being prepared for sample subprojects in Chandrauta and Charali to ensure that land donations comply with ADB's Safeguard Policy Statement principles. No temporary impacts are expected from the construction of water supply pipes. The draft resettlement plans will be updated after detailed engineering design. A resettlement framework is being prepared for the project to provide guidance in preparing future subprojects or in the event of unidentified involuntary resettlement impacts occurring during project implementation. The project is categorized as C for impacts on indigenous peoples based on the review of the sample subprojects. An indigenous peoples planning framework (IPPF) is being prepared to provide guidance in the remaining project towns, and to ensure that livelihoods, culture, dignity, and territories are not compromised by project activities. Indigenous people plan (IPP) will be prepared for the subproject following the IPPF when the impacts are significant or are not related to involuntary resettlement, otherwise specific actions for the affected indigenous community or people can be incorporated into the resettlement plan.

## F. Risks and Mitigating Measures

25. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>40</sup> The risks can be mitigated, thus integrated benefits and impacts are expected to outweigh the costs.

Risks	Mitigating Measures
The peace process, local elections, and political instability may affect service delivery, institutional structure, and project implementation.	Development partners will maintain dialogue with the government and key stakeholders to ensure that the development and reform process is not derailed. Institutional design of the project involving WUAs in service will further ensure consensus and involvement of stakeholders. A risk assessment was carried out with the help of a tool specifically developed for Nepal. <sup>a</sup>

Table 4: Summary	y of Risks and Mitigating Measures	\$
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<sup>&</sup>lt;sup>38</sup> Initial Environmental Examinations for Chandrauta, Charali and Mahendranagar (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>39</sup> Environmental Assessment and Review Framework, Resettlement Plan, Resettlement Framework, and Indigenous Peoples Planning Framework (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>40</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Risks	Mitigating Measures
WUAs or local bodies do not	The project will (i) establish an ISSAU to provide technical, financial,
have adequate technical capacity	and institutional support for utility management to the WUAs or local
in terms of equipment, staff skills,	bodies; (ii) provide 1-year operation and maintenance through
and financial resources to	contractors, and extensive preparation of WUAs or local bodies before
manage the operation of the new	and after takeover; and (iii) prepare business plans and assist in
facilities in a sustainable way.	establishing all utility management tools for the WUAs or local bodies.
WUAs or local bodies are not	The project provides up to 70% of government grants for water supply
able to service debt or to collect	and 85% for sanitation subprojects. The loan repayment period has
necessary funds from the users	been increased by 5 years, and other terms and conditions have been
to rehabilitate or expand services.	relaxed compared with the first and second projects.

ISSAU = institutional support and service advisory unit, and WUA = water users' association.

<sup>a</sup> Peace Filter for Design and Implementation of Project (accessible from the list of linked documents in Appendix 2). Source: Asian Development Bank.

#### IV. ASSURANCES AND CONDITIONS

26. The government, MOUD, and the TDF have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents. They have also agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

27. No withdrawals shall be made with respect to certain civil works until (i) a subsidiary loan agreement shall have been duly signed and delivered; (ii) a form of subproject financing agreement shall have been finalized in a form and substance satisfactory to ADB; and (iii) certain conditions for a subproject have been satisfied, as set forth in the loan agreement.

#### V. RECOMMENDATION

28. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and, acting in the absence of the President, under the provisions of Article 35.1 of the Articles of Agreement of ADB, I recommend that the Board approve

- (i) the loan in various currencies equivalent to SDR38,921,000 to Nepal for the Third Small Towns Water Supply and Sanitation Sector Project, from ADB's Special Funds resources, with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board;
- (ii) the administration by ADB of the loan not exceeding the equivalent of \$20,000,000 to Nepal for the Third Small Towns Water Supply and Sanitation Sector Project, to be provided by the OPEC Fund for International Development; and
- (iii) the administration by ADB of the grant not exceeding the equivalent of \$1,300,000 to Nepal for the Third Small Towns Water Supply and Sanitation Sector Project, to be provided by the Sanitation Financing Partnership Trust Fund under the Water Financing Partnership Facility.

Bindu N. Lohani Vice President

28 August 2014

DESIGN AND MONITORING FRAMEWORK					
Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks		
Impact Improved living conditions in project towns	<b>By 2023</b> Reported cases of diarrhea in children under 5 years of age reduced to 98 per 1,000 in 26 project towns (2011 baseline: average 140 per 1,000)	Project towns' hospital records; project socioeconomic surveys	Assumption Potential transition to federal structure and local elections do not derail the sector		
	Average time per day per household to fetch water reduced to zero in 26 project towns (2014 baseline: 40 minutes)	Project socioeconomic surveys before and after completion	reforms and project implementation.		
Outcome Inclusive, gender- focused, and sustainable WSS service delivery in project towns	<b>By 2020</b> 390,000 people in project towns have access to 24-hour, 7-day piped water supply at 100 lpcd that meets the national drinking water quality standards of 2005 (including all poor, female headed household, and vulnerable <sup>a</sup> households) (2014 baseline: 19,500 people have piped water 2 hours per day at 45 lpcd.) 390,000 people in project towns have access to improved sanitation facilities (including all poor, female headed household, and vulnerable households) (2014 baseline: 288,600 people) Institutional and regulatory framework for WUAs in small towns strengthened through tariff guidelines, corporatization, and management agreements (baseline: none	(For all indicators) National census; reports by WUAs or local bodies; and project surveys Reports by regional water quality monitoring laboratories National census, reports by PMOs, WUAs or local bodies Local water sanitation and hygiene coordination committees' reports	Assumption Timely implementation of tariff increases <b>Risk</b> PMO, WUAs or local bodies do not have adequate technical and financial resources to manage the facilities and services sustainably.		
	existing)	and declaration of open-defecation-free for the project towns			
Outputs 1. Improved WSS infrastructure	<b>In project towns by 2020</b> About (i) 1,450 kilometers of supply pipelines installed; (ii) 78,000 additional households connected to piped water supply; and (iii) 26 wastewater treatment plants with an estimated capacity of 50,000 m <sup>3</sup> /day constructed (covering all poor, female headed household, and vulnerable households in project areas)	(For all indicators) Project progress reports by PMOs, WUAs or local bodies, and reports by the Ministry of Urban Development (through SEIU)	Assumptions Timely availability of cofinancing resources Timely approval of national budget No delays in obtaining		
	Around 20,300 additional private and 26 public toilets with septic tanks constructed (covering all poor, female headed household, and vulnerable households)		required clearances, environmental approval, and resettlement approval during		

## **DESIGN AND MONITORING FRAMEWORK**

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	14 septage treatment facilities <sup>b</sup> and two decentralized wastewater treatment plants (2,500 m <sup>3</sup> /day) constructed		implementation
	Drainage master plans for estimated five towns with flooding risk measures and priority drains completed		
	About five lots of existing water supply systems rehabilitated or expanded		
	Nonrevenue water kept at around 10% in project towns; and about 100 tons of carbon dioxide emission reduced <sup>c</sup>		
2. Strengthened sector policy, regulatory and institutional capacity, and service delivery	<b>By 2020</b> Tariff guidelines prepared, adopted, and implemented in small towns	(For all indicators) Project progress reports by PMOs, Town Development Fund, ISSAU, and SEIU	Assumptions Government's timely approval of qualified staff for ISSAU and NWSSTC. Government's continued commitments to improve the Town Development Fund's capacity as financial intermediary for WSS sector
	ISSAU established in DWSS; central office building of DWSS built; and business plans for DWSS, National Water Supply and		
	Sanitation Training Centre (NWSSTC), SEIU, and WUAs adopted.		
	Town Development Fund restructured to strengthen its capacity and allow flexible financing of WSS projects in small towns		
	Solid waste management plans completed and adopted for project towns		
	Women executives in WUAs or local bodies trained for leadership (target: 100% of female executives trained in project WUAs or local bodies)		
	Minimum 200 staff of project WUAs or local bodies trained in technical, financial, and utility management (target: 100% of female staff in the WSS trained)		
	Computerization of billing and collection system completed and operational in project towns		
	At least 20,300 households received awareness-raising information on water conservation; livelihood enhancement; solid waste management; and water, sanitation, and hygiene (target: at least 80% women).		

Design	Performance Targets and Indicators with	Data Sources and Reporting	Assumptions
Summary	Baselines	Mechanisms	and Risks
3. Improved	By 2020 Staff of central and regional PMOs fully	(For all indicators) Project progress	
project implementation	trained in project management	reports by PMOs	
implementation	(target: at least 30% women)	reports by FINOS	
	(larget. at least 50 % women)		
	Project implemented on time and within		
	budget		
Activities with M		Inputs	
	Activities with Milestones 1. Output 1: Improved WSS infrastructure		
	led engineering design and issue bid	Loans:	
	or WSS packages in 12 towns (Q4 2014)	Asian Development	\$60 million
	1.2 Sign management agreements (Q4 2014)		<b>4666</b>
	1.3 Finalize detailed engineering design and issue WSS bid		
	documents for remaining towns (Q3 2015)		
	1.4 Protect water supply source and prepare water safety		\$20 million
plans for project towns (Q3 2016)			
1.5 Award contracts for all towns (first quarter 2016)		Grant:	
1.6 Complete construction (Q1 2019)		Sanitation Financing Partnership Trust	
	2. Output 2: Strengthened sector policy, regulatory and		
	institutional framework, and service delivery		
	adopt business plans for DWSS, National	Water Financing	
	and Sanitation Training Centre, and	Partnership Facility	\$1.3 million
	WUAs or local bodies (Q2 2016)	Government	
	2.2 Produce annual sector performance reports, and establish		\$23.1 million
	monitoring and evaluation system in SEIU	Beneficiaries	\$4.6 million
	tarting from 2015)		
	2.3 Complete awareness training in project towns, PMOs, and DWSS (Q3 2017)		
3. Output 3: Improved project implementation			
3.1 Allocate adequate budget for project (Q2 2014)			
3.2 Recruit all consultants under the project (Q1 2015)			
3.3 PMOs established and fully staffed (by Q1 2015)			
	3.4 Establish project performance management system (Q2		
2015)	· · ·		

DWSS = Department of Water Supply and Sewerage, ISSAU = institutional support and service advisory unit, lpcd = liters per capita per day,  $m^3$  = cubic meter, NWSSTC = National Water Supply and Sanitation Training Centre, O&M = operation and maintenance, PMO = project management office, Q = quarter, SEIU = sector efficiency improvement unit, WSS = water supply and sanitation, WUA = water users' association.

<sup>a</sup> Vulnerable people are defined as those suffering the effects of marginalization within or outside their community due to their ethnicity, gender, caste, religion, disability, health, education, or socioeconomic status. For the purpose of the project, this specifically includes Dalit, disabled, disaster-affected, marginalized, and endangered indigenous groups that are politically, socially, or economically excluded.

<sup>b</sup> Institutional strengthening and physical facilities for septage management in four towns will be carried out with support from the Sanitation Financing Partnership Trust Fund under the Water Financing Partnership Facility.

<sup>c</sup> The target is indicative only.

Source: Asian Development Bank.

# LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=35173-013-3

- 1. Loan Agreement
- 2. Project Agreement
- 3. Grant Agreement
- 4. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services
- 5. Project Administration Manual
- 6. Contribution to the ADB Results Framework
- 7. Development Coordination
- 8. Financial Analysis
- 9. Economic Analysis
- 10. Country Economic Indicators
- 11. Summary Poverty Reduction and Social Strategy
- 12. Gender Action Plan: Gender Equality and Social Inclusion Action Plan
- 13. Initial Environmental Examination: Chandrauta Town Subproject
- 14. Initial Environmental Examination: Charali Town Subproject
- 15. Initial Environmental Examination: Mahendranagar Town Subproject
- 16. Environmental Assessment and Review Framework
- 17. Resettlement Plan
- 18. Resettlement Framework
- 19. Indigenous Peoples Planning Framework
- 20. Risk Assessment and Risk Management Plan

# **Supplementary Documents**

- 21. Peace Filter for Design and Implementation of Project
- 22. Grant Component of Loan—Piloting Innovative Septage Management in Small Towns
- 23. Detailed Financial Management Assessment